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Investment Banking

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Option B:

Do Financial Analysts in Investment Banks Give Unbiased Investment Recommendations ?

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Introduction

In recent years and especially after the burst of the internet bubble in April 2000 and the crash of the stock market the independence of analysts and the accuracy of their reports and recommendations has been put into question.

"A report by First Call, for example, found that **less** than **one** percent of 28,000 recommendations issued by brokerage analysts during late 1999 and most of 2000 called for investors to sell stocks in their portfolios. Within the very same time frame, the NASDAQ composite average fell dramatically. In hindsight, these recommendations appear dubious. Furthermore, First Call has determined that the ratio of buy-to-sell recommendations by brokerage analysts rose from 6:1 in the early 1990s to 100:1 in 2000."[1]

The aim of this essay is to discover the reasons for the analyst's forecast "**optimism bias**" by looking at all major sources which could influence the analyst and which could lead to a biased report and recommendation.

The objectivity of "sell-side" analysts is subject to pressure from five different sources.

1. The Analysts themselves
2. Other Analysts
3. Public Companies
4. Institutional Shareholders
5. Investment Banking

[1] Kanjorski (2001)

1. The Analysts themselves

The analysts themselves are indeed one of the factors affecting their objectivity.

All analysts face a "**cognitive bias**".

This means that analysts are for instance influenced by experiences they have made with companies they cover.

"There's also the very human dynamic that no one wants to explain away an earlier pronouncement, even when the facts have changed. The natural human tendency is to avoid looking foolish. So of course an analyst's first impulse is to say, "I was right yesterday, and I'm still right today."[2]

Furthermore, "for whatever reason, most analysts have fallen in love with the industry they cover (otherwise most that had not would have moved on to another industry that was more favourable in their eyes). Secondly, they have selected as their coverage list what they consider the best companies within their industry. As a result, the analysts come to the table looking through rose coloured glasses."[3]

Analysts view "their" firms in a unique narrow frame, which is called "the inside view".

This bias may be *conscious* or *subconscious*.

Another even more important subject that could distract the analyst's objectivity is the fact that analysts may participate in employee stock options or they may own significant positions of shares directly.

They may also acquire a stake in a start-up company by obtaining discounted pre-IPO shares - a recent trend called "*venture investing*" – and later cover the firm and give positive recommendations.

It is even possible for analysts to execute trades for their personal accounts that are contrary to their recommendations in their research reports. They could for instance sell their shares or go short while continuing to maintain a "buy" recommendation. Brokerages call this "*building inventory to satisfy demand*".

Another common method is to buy shares and then push the price by issuing a "buy" recommendation. This is called "*front running*".

[2] Becker (2001)
[3] Hill (2001)

To avoid such abuses the New York Stock Exchange (NYSE) requires covering analysts to disclose whether they "may" have an ownership interest in the company's securities (including both options and common stock).

Furthermore the National Association of Securities Dealers proposed that analysts should disclose whether they own the shares they are discussing in research reports as well as in the media.

The American investment bank "Merryl Lynch" has taken one further step.

"To head off criticism that their analysts are biased and offer misleading advice, the US investment bank Merrill Lynch, has banned its analysts from buying any new shares in the companies they cover, though they will be allowed to keep shares they already own. The analysts who decide to keep their existing shareholdings will only be allowed to sell when short and long-term opinions are "neutral" or lower. Merrill's director of global securities and research, said the move was "intended to strengthen investor confidence in the process analysts follow".

Merrill is the first large Wall Street firm to specifically prohibit its analysts from buying new shares. Other banks, including Morgan Stanley, are considering tighter disclosure rules."[4]

2. Other Analysts

The accuracy of the analyst's recommendation could be influenced by revisions made by other analysts and the prevailing consensus. The phenomenon of "**mutual imitation**" (so called "**herding**") could be the result.

"Most theories of herding have relied primarily on readers' faith in the general phenomenon and on anecdotal evidence. Herding theories suggest that prior analysts' choices are an important influence on the next recommendation.
However, from the theory's perspective, the *prevailing consensus*, the *recent revisions*, or simply the *most recent revision*, could all potentially be sufficient statistics for the decision to be made by an analyst."[5]

"Welch"[5] finds empirical evidence of analyst herding:

1. An analyst's recommendation revision has a positive influence on the next two analysts' revisions.

2. The influence of these most recent revisions can be traced to *short-lived information*. The influence is stronger when short-run ex-post stock returns are accurately predicted by the revision and when the most recent revision has occurred more recently.

3. The prevailing consensus has a positive influence on the recommendation revisions of analysts.

4. The influence of the prevailing consensus is not stronger when it is a good predictor of subsequent stock returns. Thus, the influence of the consensus is probably less related to attempts by analysts to uncover fundamental information which can help improve their own recommendations. This favours theories in which analysts' consensus herding is not the result of rational and efficient information aggregation.

5. The influence of the prevailing consensus is stronger when recent market conditions have been bullish.

[4] Martinson and Tran (2001)
[5] Welch (1999)

"Welch" makes no attempts to distinguish between different types of herding and does not examine for instance whether the incentive to adopt a behaviour increases in the number of previous adopters.

What is more, he detects behaviour consistent with "**mutual imitation**", which states that there is in fact "**herding**" amongst analysts.

3. Public Companies

The management of companies an analyst follows may put pressure on him to issue favourable reports and recommendations. The reason is compensation, as some management have significant cash bonus or options tied to share performance.

There have been occasions when companies have threatened to cut analysts from communications with them if the analyst issues a negative report on the company.[6]

Nevertheless the pressure public companies can put on analysts directly is very limited but the pressure could be addressed to the investment banking side of their firms.

4. Institutional Shareholders

"Institutional investors, such as mutual funds, that are clients of the analyst 's firm may have a significant position in the security of a company covered by an analyst. An analyst may be inhibited from issuing a rating downgrade that would adversely affect the performance of an institutional client 's portfolio for fear that the client would take its brokerage business elsewhere. Moreover, many publications rate analysts based upon input from institutional investors."[7]

"Ackert and Athanassakos"[8] find that analysts respond to increases in institutional holdings by increasing their optimism for a firm's earnings. Likewise, institutions increase their holdings in a firm when analysts revise their earnings expectations upward.

This shows that institutional investors do have an influence on analysts recommendations.

Like public companies, institutional investors address their force on the investment banking side of the analyst's firm, threatening them for instance to take their brokerage business away.

[6] stated by Hill and Unger (2001)
[7] Unger (2001)
[8] Ackert, Athanassakos (2000)

5. Investment Banking

Pressure on analysts may come from public companies as well as from institutional shareholders. However, this pressure is most likely not addressed directly to the analysts themselves but to the investment banking side of their firms, which can put greater pressure on the analysts, having influence on their salaries and employment.

At most brokerage firms, analyst compensation is based on **two** major factors.

The first factor is the analyst's perceived (external) reputation and consequently his ranking in the brokerage house hierarchy.

An analyst's place in the profession depends critically on an annual poll conducted by the magazine "*Institutional Investor*". Over 750 money managers and institutions were asked to rank analysts in several categories such as stock picking, earnings estimates, written reports, and overall service, but only two of these criteria are directly related to accurate forecasts and recommendations.

The second factor in compensation is an analyst's ability to generate investment banking business and trading commissions.

"These sources of rewards can lead analysts to compromise the objectivity and accuracy of their predictions by issuing optimistic forecasts so as to promote stocks but even if the compensation of analysts does not depend explicitly on forecast accuracy, to generate investment banking business or trading commissions in the longer run, analysts need to cultivate a reputation for forecasting expertise among the buy-side."[9]

"Hong and Kubik"[9] find empirical evidence that "accuracy is positively/negatively related to the probability of an analyst moving up/down the hierarchy. This evidence suggests that the labour market does punish the average analyst for inaccurate forecasts."

This states that analysts face a conflict of interest between their need of protecting and enhancing their reputations on the one side and generating investment banking business and trading commissions on the other.

As "Hong" finds also strong evidence that accuracy matters much less for career concerns in 1996-2000 than in earlier periods one should take a closer look at the second factor, namely trading commissions and investment banking business, as it seems to have been more important in recent years.

[9] Hong, Kubik (2001)

Trading commissions:

"It is difficult to define an analyst's precise contribution to the trading volume of a specific stock and the relation between analyst coverage and trading volume has never been confirmed using brokerage-firm level data, hence uncertainty about the economic importance of this relation remains. Instead, studies rely on conventional Wall Street wisdom to support the assumption that analysts generate trade for their firms."[10]

The paper "*Do Analysts Generate Trade for Their Firms ?*"[10] provides direct empirical evidence on a positive relation between analyst coverage and brokerage-firm volume using a unique data set from the Toronto Stock Exchange (TSE).

"On the TSE, every trade goes through a seat holder on the exchange, a broker who can trade as an agent or as a principal. When the TSE documents a trade, they record the time, volume and price information as well as two brokerage-firm identification codes. The TSE assigns each seat holder a unique two-digit code. As a result of this system, the broker that sold the security and the broker that bought the security are identified for each trade. Volume is assigned to a broker when their identification code is attached to a trade.

Because analysts tend to cover high-volume stocks, a few outlying covered stocks that have particularly high volumes could have biased the study. As an alternative to share volume, brokerage Market Share was used, which is defined as brokerage-firm share volume normalized by total volume in the stock.

The results show, that Brokers trade significantly more shares and have higher market shares in covered stocks than they do in uncovered stocks. The strength of the relation between analyst coverage and brokerage volume can be directly measured.

Analyst coverage of a particular stock results in significantly higher broker volume in that stock: on average, brokers increase their market share in covered stocks by 3.8 percent relative to uncovered stocks. Using an average institutional commission rate of six cents per share (Greenwich Associates 1993), this represents incremental brokerage revenue of approximately $150,000 per stock per year."[10]

This shows that analysts can create trading in shares with issuing positive recommendations and therefore generate revenue for their corporate department.

Nevertheless, commission revenue has declined over many years as a percentage of firm income and with commission rates driven to almost nothing the brokers had to look elsewhere to find a way to compensate the analysts. This inevitably led to the investment banking side of the broker houses and there has been a trend in the last two decades to use equity research analysts directly in the marketing and due diligence processes.

Investment Banking Business:

"An analyst's most measurable profit contribution comes from involvement in underwriting deals. Analysts who help to attract underwriting for clients may receive a portion of the fees or, more likely, bonuses that are two to four times those of analysts without underwriting contributions. Furthermore a positive recommendation after an IPO may enhance the likelihood that the underwriter will be chosen to lead the firm's next security offering. Consequently, there may be substantial pressure on analysts to produce positive reports."[11]

[10] Irvine (2001)
[11] Michaely, Womack (1999)

"Michaely and Womack"[12] have examined the differences between "buy" recommendations issued by lead underwriters' analysts of new initial public offerings (IPOs) and recommendations by non-underwriter sell-side analysts.

They find the following differences in returns *before*, *at*, and *after* analysts' buy recommendations.

1. "When the lead underwriter recommends "buy," the IPO stock increases 2.7% on average *at the time of* the "buy" recommendation. When analysts from non-lead banks recommend "buy," the increase is 4.4%."

This disproves the "superior information hypothesis", which predicts that underwriter analysts have an informational advantage, thus be more knowledgeable than their competitors and produce more accurate forecasts. If this was the case the market should greet underwriters' superior information with a more pronounced immediate response.

2. "In the month *before* a "buy" recommendation, the stocks recommended by lead underwriters had gone down 1.6% on average. In contrast, stocks recommended by non-lead bank analysts had gone up 4.1%."

This indicates, that underwriter analysts attempt to push prices of poorly performing underwritten firms, since these are exactly the firms that need a "booster shot" (a positive recommendation when the share-price is falling).

3. "In the one-year period *after* the buy recommendations, the underwriter recommended stocks underperformed the market by 5% on average, while the stocks recommended by non-underwriters outperformed the market by 13 %."

This shows that the recommendations by the underwriters are indeed upward-biased. If underwriter analysts had information, not yet incorporated into prices, their recommended shares should perform better than the shares recommended by the non-underwriter analysts. But they seem to have more independence to recommend only those shares that they believe to be attractive.

4. "For twelve out of fourteen brokerage firms we examine, the average one-year market-adjusted return after buy recommendations where they were the lead underwriter was lower than the return after their recommendations on other banks' IPOs."

"Because these results are consistent across the major brokers it is not the difference in investment banks' ability to analyse firms that drives the results, but a **bias** directly related to whether the recommending broker is the underwriter of the IPO."

[12] Michaely, Womack (1999)

For “Michaely and Womack” there could be two possible, not mutually exclusive, explanations for their observed bias.

1st explanation: “***selection bias***”

“Underwriters are chosen, in part, *because* of the favourable views they have about a firm. Their recommendations and views are thus a manifestation of the well-known “winner’s curse” or “**selection bias**”. With a positive predisposition, analysts interpret new information signals differently from other analysts. Thus, the underwriter analyst’s priors are almost by definition overly positive.”[13]

A good example for “**selection bias**” is stated below, which shows that sometimes analysts are even chosen because of their well-known positive view of a whole sector – in this case the Internet sector.

“In the summer of 1998, eager to discuss a potential public offering, the Internet start-up Priceline contacted Morgan Stanley Dean Witter. But executives from the discount travel agency didn't ask to speak to an investment banker, or one of the brokerage house's partners.
Instead, they called Mary Meeker. As the firm's hotshot Internet analyst, she had the power that Priceline wanted, the power to boost a stock's price by simply giving it a "buy" rating.

The call broke from financial tradition: Analysts are theoretically supposed to focus on research, not the actual underwriting of would-be public companies. But Priceline's executives didn't seem to care. After choosing Morgan, Priceline CEO Richard Braddock emphasized Meeker's role. Neither the bank's reputation nor the nuts and bolts of the IPO's proposed terms swayed Braddock, according to Benjamin Cole's enlightening new book, "The Pied Pipers of Wall Street: How Analysts Sell You Down the River." Meeker's coverage was the product that mattered most to Priceline.

"We just think Mary is the best," Braddock said. "That was the distinguishing reason we chose Morgan."”[14]

2nd explanation: “***strategic conflict of interest***”

“Underwriters’ analysts may recommend their own IPO deals for strategic reasons, for example, to protect and reinforce relationships with the offering firms-even if it is not in the best interest of their investing clients. Their valuation “requirements” for issuing a buy recommendation are strategically less stringent (or, they use a lower “hurdle”) when they have underwritten the IPO recently.”[13]

To determine which explanation is more dominant, the authors surveyed investment bankers and investment managers who are directly involved in buying and selling IPOs.

The survey found that 13 out of 13 investment management firms and 10 out of 13 investment banking firms believe the **bias** in recommendations made by analysts whose firms had underwritten shares to be the result of a “**strategic conflict of interest**” (only 12% believed that the results are caused by “**selection bias**”)

[13] Michaely, Womack (1999)
[14] Cave (2001)

As shown above analysts are subject of a "**strategic conflict of interest**".

On one hand there is the need of analysts to protect and enhance their reputations on the other hand there is the desire of corporate finance to complete transactions.

In the following two final examples it is stated that there is indeed implicit *pressure* on analysts to issue and maintain positive recommendations on a firm that is either an investment banking client or a potential client.

Morgan Stanley internal memo *(Wall Street Journa*l, July 14, 1992):[15]

"Our objective . . . is to adopt a policy, fully understood by the entire firm, including the Research Department, that we do not make negative or controversial comments about our clients as a matter of sound business practice."

…and a more recent example…

JP Morgan internal memo (*The London Times,* March 21, 2001):[16]

Analysts must seek comments from the relevant JP Morgan investment banker before changing a stock recommendation. Furthermore, the analyst must seek comments from the company in question, and if the company "requests changes to the research note, the analyst has a responsibility," according to the article, "to incorporate the changes requested or communicate clearly why the changes cannot be made."

[15] taken from Michaely, Womack (1999)
[16] taken from Tice (2001)

Conclusions

Five important potential *sources of pressure* that have more or less influence on analysts and which could lead to a biased report and recommendation have been discovered.

All analysts, whether they are "sell-side" or "buy-side" analysts, face a "**cognitive bias**".
This bias may be *conscious* or *subconscious* however it is not to be considered a very strong influence.

Moreover a conflict involving all analysts owning, buying or selling shares on companies they cover is apparent, but it is very unlikely that well-known analysts, being able to push/bash share prices, will risk their reputation by abusing this power.

What also has been found is the fact that there is "**herding**" amongst analysts and that the *prevailing consensus* has an influence on analysts' recommendations. But like the "**cognitive bias**" this is not to be considered a very significant influence.

Furthermore, *public companies* and *institutional shareholders* put pressure on analysts but it is foremost addressed to the investment banking side of their firms.

Consequently *investment banking* is the source of the greatest pressure for "sell-side" analysts. This is most likely not due to "**selection bias**" but because of analysts facing a "**strategic conflict of interest**" between their need of protecting and enhancing their reputations on one hand and generating investment banking business and trading commissions on the other.

But with the investment-banking department having influence on analysts' salaries and employment, they do not really have a choice.

All these findings suggest that analyst's forecast "**optimism bias**" is likely due to *incentives to promote shares*.

Thus it is highly improbable if not totally impossible that analysts in investment banks give **unbiased** investment recommendations.

Remarks

Despite the fact that it is very unlikely that well-known analysts, being able to push/bash share prices, will risk their reputation by abusing this power, the temptation should be taken off them. Consequently covering analysts should **NOT** be allowed to trade options and shares of companies they cover.

There have been many suggestions on how to reduce analysts' "**strategic conflict of interest**" and thus solve the main problem of biased analyst recommendations but most of them seem impossible to implement.

For example the separation of research from investment banking and trading would require a significant change in business practices, as the so-called "Chinese Wall" has too many holes to work appropriately. Moreover it must be questioned whether it is possible to achieve complete analyst objectivity with separating analysts from the rest of a firm's business and whether they would then be of any value at all.

In my opinion rather then trying to look for someone to blame and to force analysts to issue unbiased reports and recommendations one should concentrate on providing a greater transparency of information.

It would help a lot if for instance one could analyse the performance of an individual analyst or firm by accessing all the needed recommendation data. Everybody could then make up his or her own mind.

As the most important point, investors – like indeed every member of society – should be educated in **NOT** believing everything they read, hear or see.

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